INTERNATIONAL

CRISIS & RISK COMMUNICATION

CONFERENCE • 2015

Building Resilient Communities: Ebola Response in West Africa. Where Do We Need to Go?

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Pennsylvania State University

2015 INTERNATIONAL CRISIS & RISK COMMUNICATION CONFERENCE

Building Resilient Communities: Ebola Response in West Africa. Where do we Need to Go?

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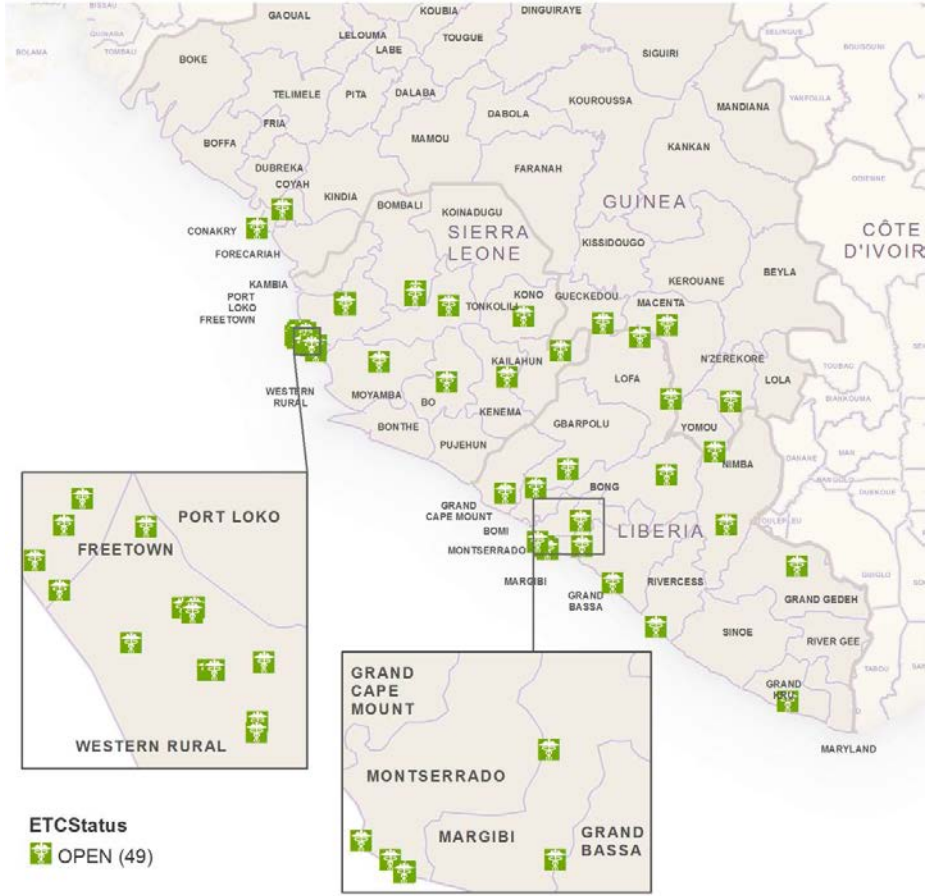
ERG
Safer Together

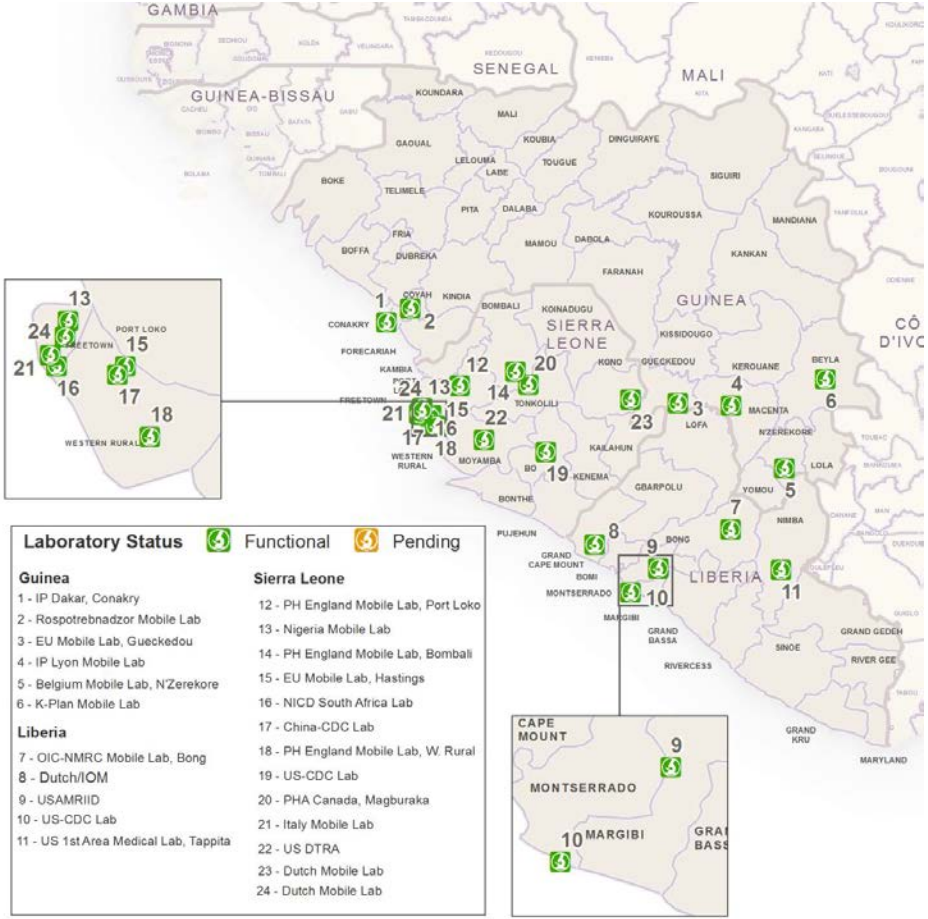
Insufficient Health Systems – 17 Oct 2014

CDC / Via cdc.gov

Ebola Treatment Centers – 28 Feb 2015

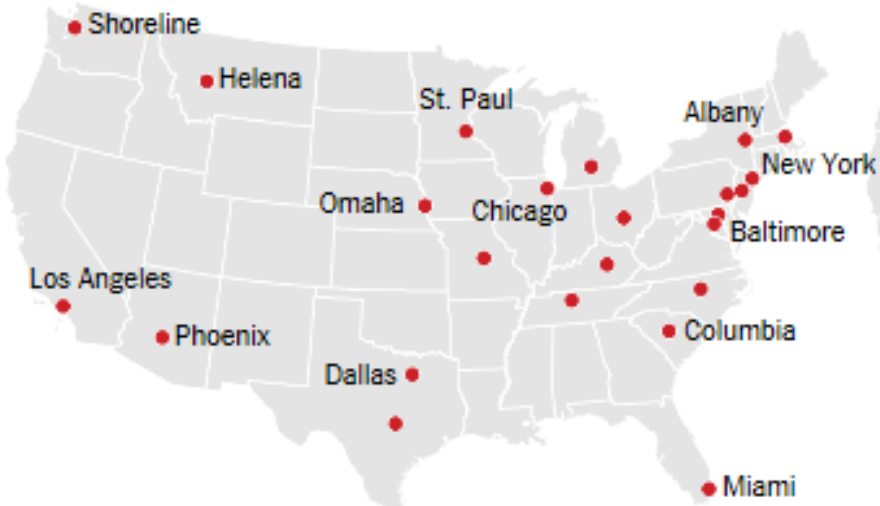


Ebola Laboratories – 28 Feb 2015



Ebola Preparedness in the U.S.

Public Health Laboratories

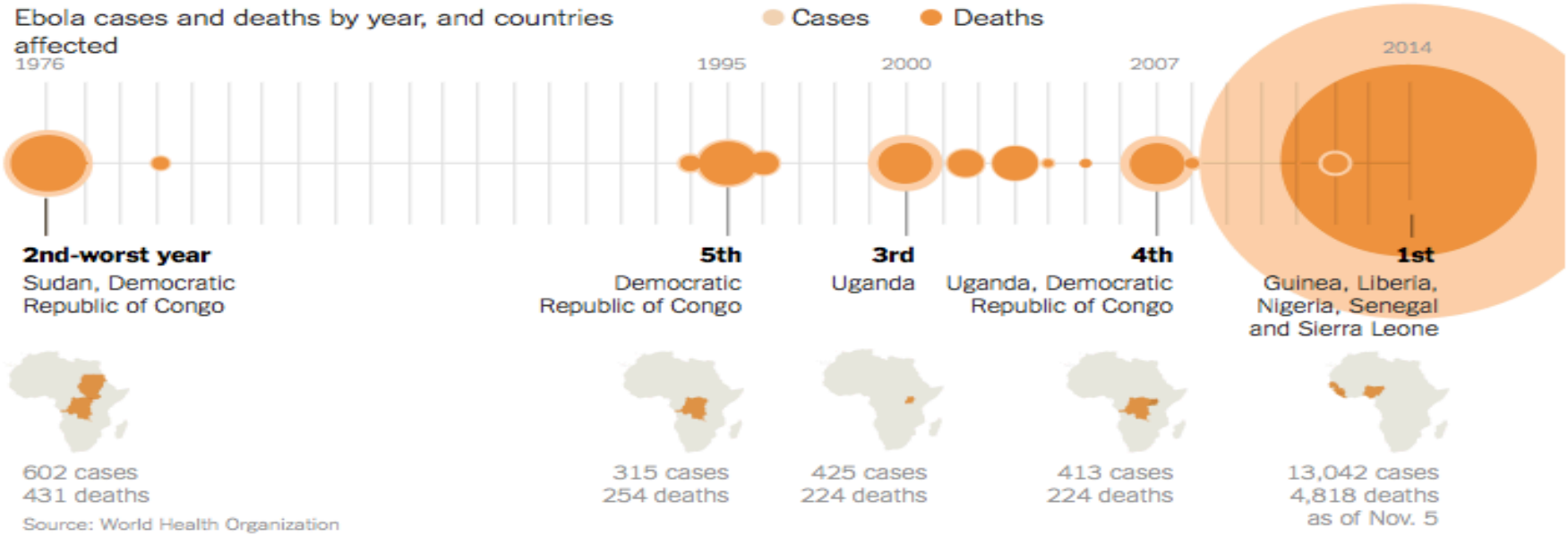


Hospitals designated to accept Ebola patients

Source: http://www.nytimes.com/interactive/2014/07/31/world/africa/ebola-virus-outbreak-qa.html

How Does This Compare to Past Outbreaks? UPDATED NOV. 5

It is the deadliest, eclipsing an outbreak in 1976, the year the virus was discovered.



Ebola Cases – WHO 28 January 2015

Country	Case definition	Cumulative cases	Cases in past 21 days	Cumulative deaths
Guinea	Confirmed	2569	92	1578
	Probable	332	*	332
	Suspected	16	*	‡
	Total	**2917**	**92**	**1910**
Liberia	Confirmed	3138	20	‡
	Probable	1864	*	‡
	Suspected	3620	*	‡
	Total	**8622**	**20**	**3686**
Sierra Leone	Confirmed	7968	366	2833
	Probable	287	*	208
	Suspected	2263	*	158
	Total	**10 518**	**366**	**3199**
Total		**22 057**	**478**	**8795**

*Data are based on official information reported by ministries of health. These numbers are subject to change due to ongoing reclassification, retrospective investigation and availability of laboratory results. *Not reported due to the high proportion of probable and suspected cases that are reclassified. ‡ Data not available.*

Ebola Cases – WHO 18 February 2015

Country	Case definition	Cumulative cases	Cases in past 21 days	Cumulative deaths
Guinea	Confirmed	2727	156	1683
	Probable	374	*	374
	Suspected	7	*	‡
	Total	**3108**	**156**	**2057**
Liberia**	Confirmed	3149	11	‡
	Probable	1876	*	‡
	Suspected	3982	*	‡
	Total	**9007**	**11**	**3900**
Sierra Leone	Confirmed	8212	230	3042
	Probable	287	*	208
	Suspected	2604	*	158
	Total	**11103**	**230**	**3408**
Total		**23 218**	**397**	**9365**

*Data are based on official information reported by ministries of health. These numbers are subject to change due to ongoing reclassification, retrospective investigation and availability of laboratory results. *Not reported due to the high proportion of probable and suspected cases that are reclassified. ‡ Data not available. **Data are missing for 13, 14 and 15 February.*

Ebola Cases – WHO 25 February 2015

Country	Case definition	Cumulative cases	Cases in past 21 days	Cumulative deaths
Guinea	Confirmed	2762	152	1704
	Probable	387	*	387
	Suspected	6	*	‡
	Total	**3155**	**152**	**2091**
Liberia	Confirmed	3153	10	‡
	Probable	1888	*	‡
	Suspected	4197	*	‡
	Total	**9238**	**10**	**4037**
Sierra Leone	Confirmed	8289	235	3095
	Probable	287	*	208
	Suspected	2725	*	158
	Total	**11 301**	**235**	**3461**
Total		**23 694**	**397**	**9589**

*Data are based on official information reported by ministries of health. These numbers are subject to change due to ongoing reclassification, retrospective investigation and availability of laboratory results. *Not reported due to the high proportion of probable and suspected cases that are reclassified. ‡Data not available.*

Ebola Cases Males vs Females – WHO 25 February 2015

Country	Cumulative cases				
	By sex* (per 100 000 population)		By age group‡ (per 100 000 population)		
	Male	Female	0–14 years	15–44 years	45+ years
Guinea	1481 (27)	1586 (29)	487 (10)	1720 (37)	837 (54)
Liberia	2854 (143)	2809 (143)	962 (56)	3054 (179)	1169 (219)
Sierra Leone	5197 (182)	5540 (191)	2242 (92)	5959 (230)	2350 (318)

Population figures are based on estimates from the United Nations Department of Economic and Social Affairs.[2] **Excludes cases for which data on sex are not available. ‡Excludes cases for which data on age are not available.*

Ebola Cases – WHO 25 February 2015

Ebola cases in Health Workers

Country	Cases	Deaths
Guinea	170	89
Liberia	372	180
Sierra Leone*	295	221
Total	**837**	**490**

Data are confirmed cases and deaths only, apart from deaths in Sierra Leone, which include confirmed, probable, and suspected deaths.
**Data for 17 February.*

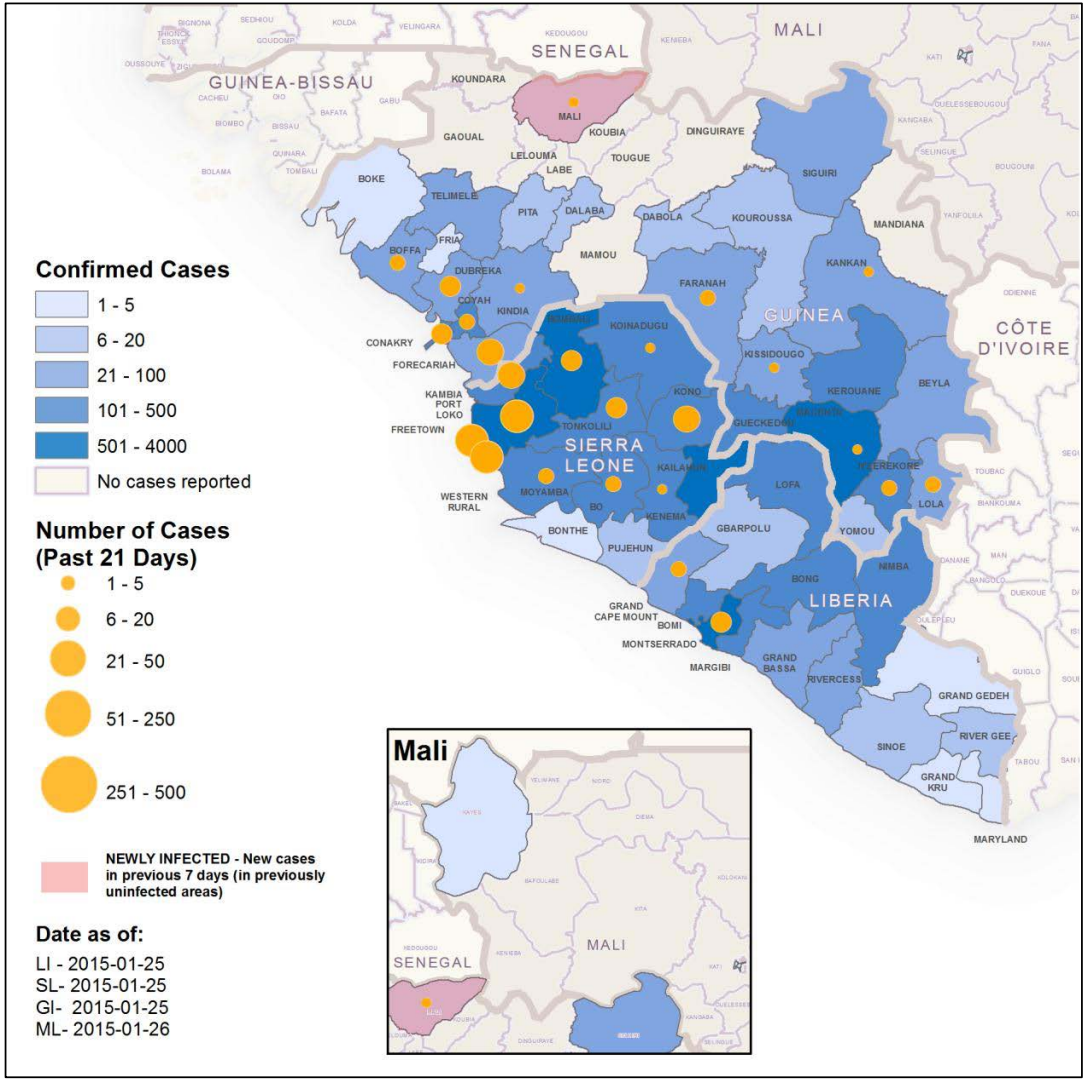
West Africa: Ebola Preparedness 25 Feb 2015

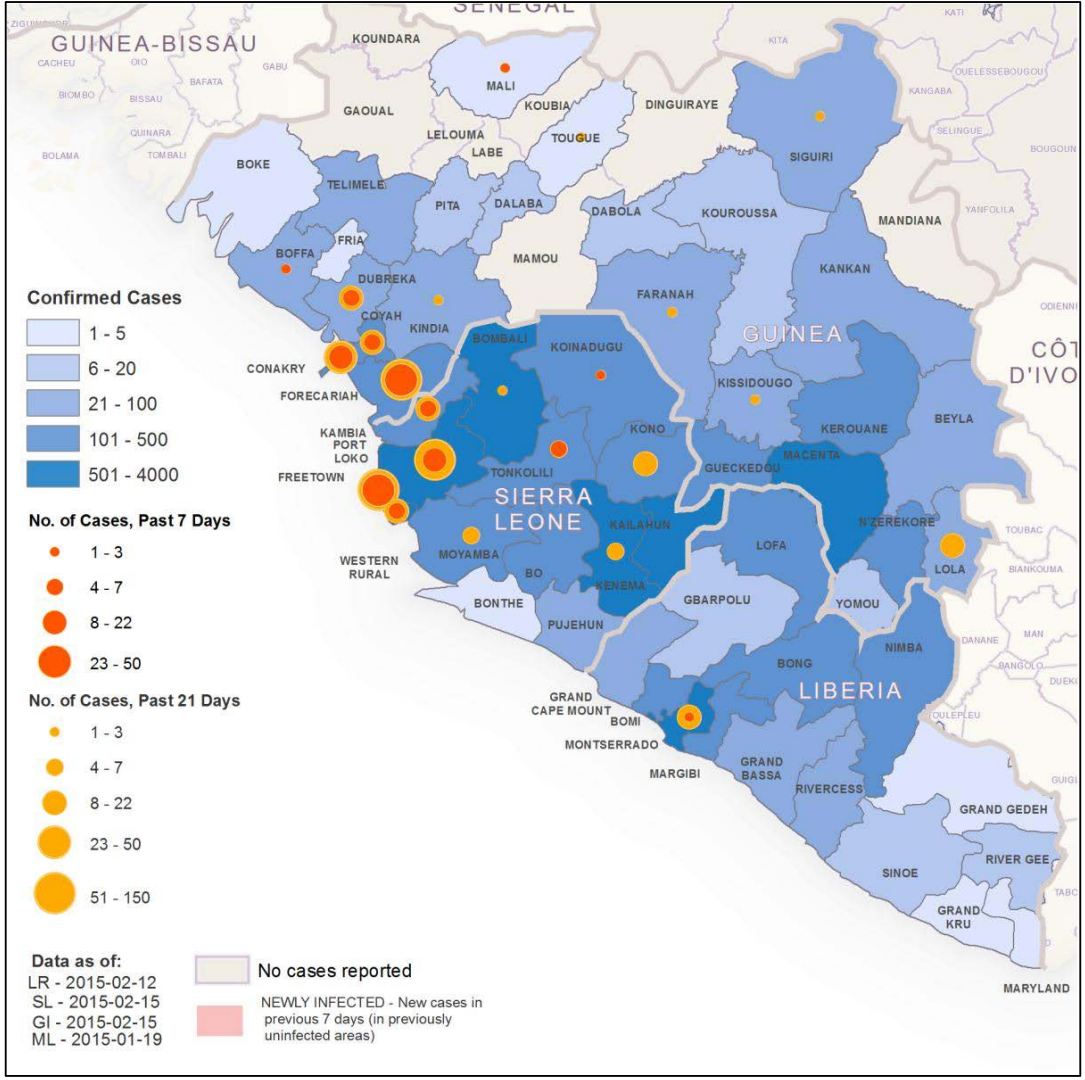
Country Preparedness Summery	Benin		Burkina Faso		Central African Republic		Cameroon		Cote d'Ivoire		Ethiopia		Ghana		Guinea Bissau		The Gambia		Mali		Mauritania		Niger		Senegal		Togo	
	Min	Add	Min	Add	Min	Add	Min	Add	Min	Add	Min	Add	Min	Add	Min	Add	Min	Add	Min	Add	Min	Add	Min	Add	Min	Add	Min	Add
1 Overall Coordination	0%	0%	20%	0%	0%	0%	0%	0%	0%	15%	20%	25%	0%	0%	0%	0%	50%	0%	30%	100%	0%	45%	20%	25%	20%	20%	0%	0%
2 Rapid Response Teams	0%	0%	0%	0%	0%	0%	0%	20%	30%	20%	100%	0%	40%	20%	0%	0%	0%	0%	0%	20%	20%	0%	0%	0%	70%	60%	0%	0%
3 Public Awareness and Community Engagement	25%		0%		0%		0%		0%		75%		50%		0%		75%		75%		0%		50%		100%		25%	
4 Infection Prevention and Control	0%	0%	0%	0%	0%	0%	0%	100%	40%	100%	70%	100%	0%	100%	0%	0%	30%	0%	30%	100%	0%	100%	0%	0%	0%	0%	0%	0%
5a Case Management	0%	0%	0%	0%	0%	0%	0%	0%	50%	75%	50%	100%	50%	25%	50%	0%	15%	0%	0%	0%	0%	75%	0%	0%	25%	75%	25%	0%
5b Safe and Dignified Burials	0%	0%	0%	0%	0%	0%	0%	0%	0%	65%	50%	70%	0%	0%	0%	0%	0%	0%	50%	35%	0%	0%	0%	35%	50%	70%	0%	0%
6 Epidemiological Surveillance	20%	0%	20%	0%	0%	0%	0%	0%	60%	0%	80%	60%	40%	100%	0%	0%	0%	0%	60%	30%	20%	0%	0%	0%	80%	60%	20%	0%
7 Contact Tracing	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	50%	0%	50%	50%	0%	0%	0%	0%	50%	0%	0%	0%	0%	0%	0%	0%	0%	0%
8 Laboratory	0%		100%		50%		75%		0%		25%		50%		0%		0%		75%		50%		50%		100%		100%	
9 Capacities at Points of Entry	35%	0%	15%	0%	0%	0%	0%	0%	15%	0%	100%	100%	0%	0%	35%	0%	0%	0%	70%	50%	0%	0%	0%	50%	45%	50%	15%	0%
10 Budget	0%	0%	20%	0%	20%	0%	30%	50%	0%	0%	20%	0%	0%	0%	0%	0%	0%	0%	70%	100%	70%	0%	0%	0%	0%	0%	20%	0%
11 Logistics	0%	0%	10%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	55%	60%	10%	0%
Agragated Total Indication of Level of Preparedness	7%	0%	19%	0%	6%	0%	10%	17%	17%	28%	64%	46%	24%	29%	7%	0%	15%	0%	46%	43%	16%	22%	12%	11%	55%	40%	21%	0%
Indication of combined Country level of Preparedness	4%		10%		3%		14%		23%		55%		27%		4%		7%		44%		18%		22%		48%		11%	

Not Started | In Progress | Completed | Not Reported

Min Minimum Requirement Tasks for Global Preparedness

Add Additional Requirement Tasks for Priority Countries


Confirmed Cases
1 - 5
6 - 20
21 - 100
101 - 500
501 - 4000
No cases reported
Number of Cases (Past 21 Days)
1 - 5
6 - 20
21 - 50
51 - 250
251 - 500
NEWLY INFECTED - New cases in previous 7 days (in previously uninfected areas)
Date as of:
LI - 2015-01-25
SL- 2015-01-25
GI- 2015-01-25
ML- 2015-01-26
Mali
SENEGAL
GUINEA-BISSAU
MALI
GUINEA
CÔTE D'IVOIRE
SIERRA LEONE
LIBERIA
KOUNDARA
GAOUAL
KOUBIA
DINGUIRAYE
LELOUMA
TOUGUE
LABE
BOKE
TELIMELE
PITA
DALABA
DABOLA
KOUROUSSA
SIGUIRI
MANDIANA
KANKAN
BOFFA
FRIA
DUBREKA
MAMOU
FARANAH
COYAH
KINDIA
KOINADUGU
CONAKRY
FORECARIAH
KISSIDOUGO
KEROUANE
BEYLA
KAMBIA
PORT LOKO
KONO
FREETOWN
TONKOLILI
GUECKEDOU
KAILAHUN
KENEMA
LOFA
LOLA
MOYAMBA
BO
WESTERN RURAL
BONTHE
PUJEHUN
GBARPOLU
YOMOU
NIMBA
BONG
GRAND CAPE MOUNT
BOMI
MONTSERRADO
MARGIBI
GRAND BASSA
RIVERCESS
GRAND GEDEH
SINOE
RIVER GEE
GRAND KRU
MARYLAND


GUINEA-BISSAU
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GUINEA
CONAKRY
KISSIDOUGO
FORECARIAH
KONO
KEROUANE
BEYLA
KAMBIA
PORT
LOKO
MACENTA
GUECKEDOU
FREETOWN
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SIERRA
LEONE
KAILAHUN
N'ZEREKORE
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PUJEHUN
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LIBERIA
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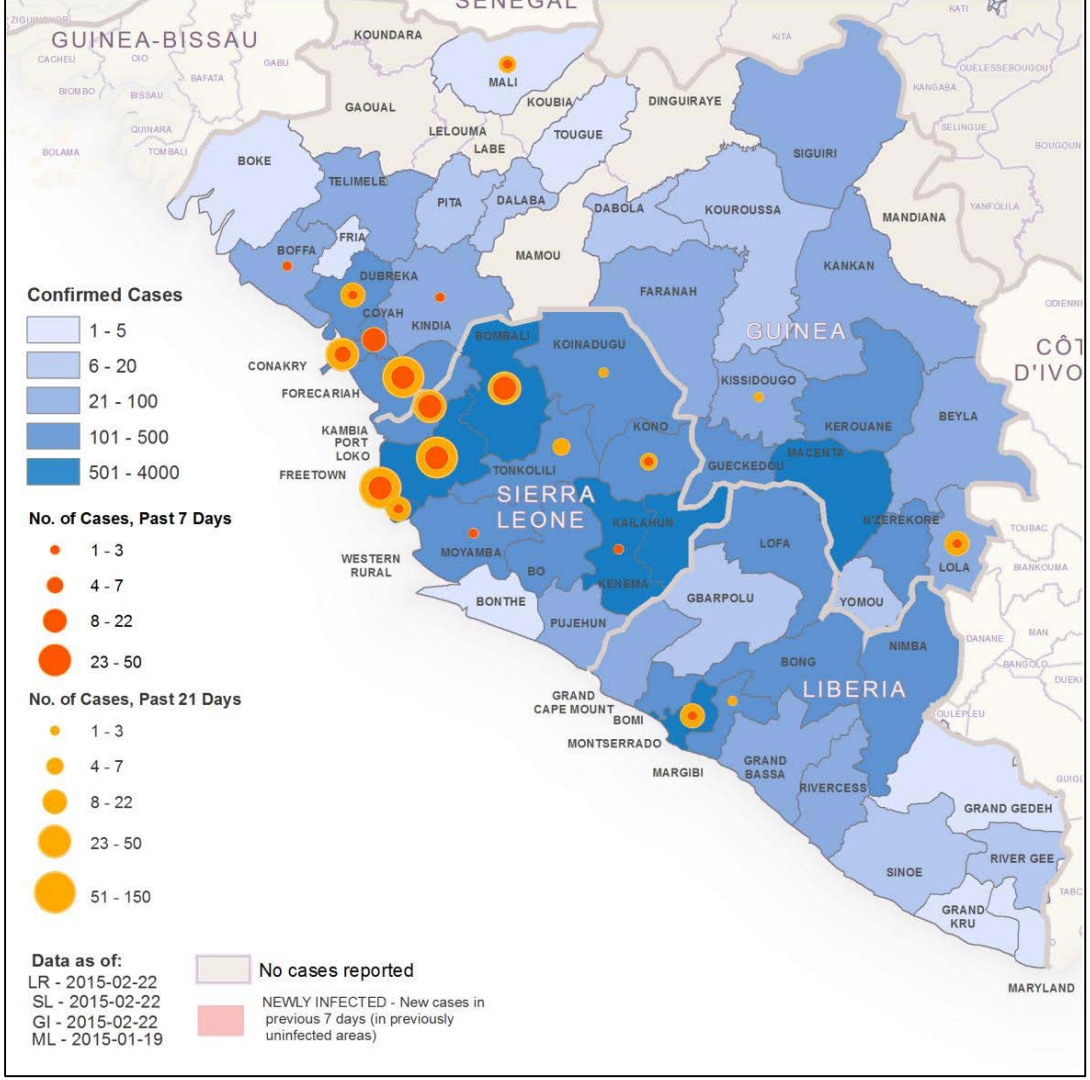
CAPE MOUNT
BOMI
MONTSERRADO
MARGIBI
GRAND
BASSA
RIVERCESS
GRAND GEDEH
RIVER GEE
SINOE
GRAND
KRU
MARYLAND
Confirmed Cases
1 - 5
6 - 20
21 - 100
101 - 500
501 - 4000
No. of Cases, Past 7 Days
1 - 3
4 - 7
8 - 22
23 - 50
No. of Cases, Past 21 Days
1 - 3
4 - 7
8 - 22
23 - 50
51 - 150
Data as of:
LR - 2015-02-12
SL - 2015-02-15
GI - 2015-02-15
ML - 2015-01-19
No cases reported
NEWLY INFECTED - New cases in previous 7 days (in previously uninfected areas)


GUINEA-BISSAU
SENEGAL
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GRAND BASSA
RIVERCESS
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SINOE
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Confirmed Cases
1 - 5
6 - 20
21 - 100
101 - 500
501 - 4000
No. of Cases, Past 7 Days
1 - 3
4 - 7
8 - 22
23 - 50
No. of Cases, Past 21 Days
1 - 3
4 - 7
8 - 22
23 - 50
51 - 150
Data as of:
LR - 2015-02-22
SL - 2015-02-22
GI - 2015-02-22
ML - 2015-01-19
No cases reported
NEWLY INFECTED - New cases in previous 7 days (in previously uninfected areas)

Ebola Response Team in Nigeria

Source: Dr. Gavin Macgregor-Skinner

Ebola Response Team in Nigeria - Training

Source: Dr. Gavin Macgregor-Skinner

Risk Assessments - Hospital Laundry & Terrorism

Banks Defend Reintroduction of ATM Withdrawals Charges

Uzoma Dozie: It will encourage transactions through other channels

THISDAY

Two Spouses of Sawyer's Primary Contacts Test Positive for Ebola

Most secondary contacts no longer threat to public health, Says CDC

Obasanjo commends FG, Lagos over control

Boko Haram: Minimah Hints of Major Army Shake Up

BEHOLD... WOMEN OF CONFAB

FUEL YOUR BUSINESS

access

Source: Dr. Gavin Macgregor-Skinner

Ebola Response Team in Nigeria - Nurses

Source: Dr. Gavin Macgregor-Skinner

Ebola Response Team in Nigeria - Transport

Source: Dr. Gavin Macgregor-Skinner

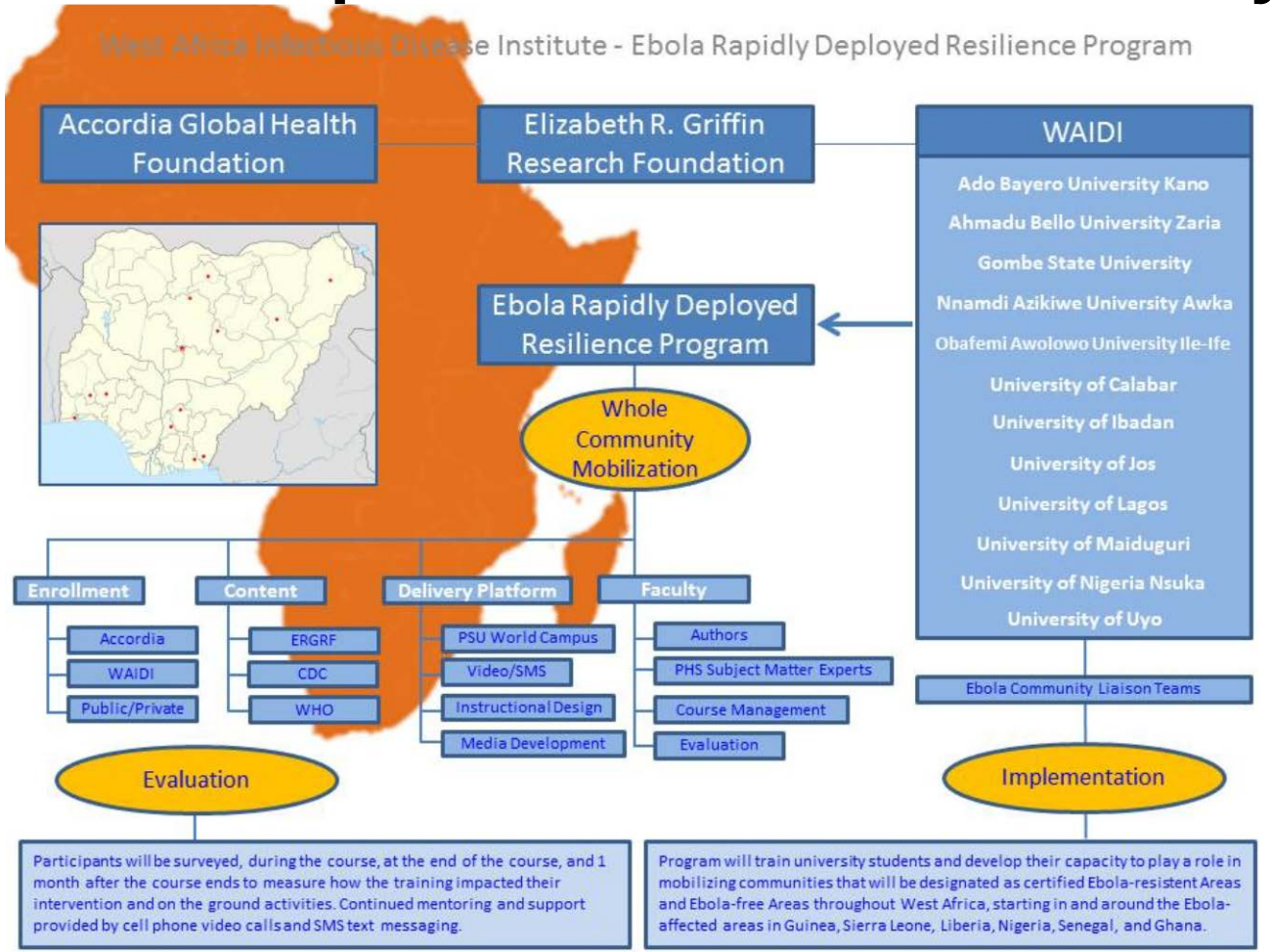
Ebola Response Team in Nigeria - Community

Source: Dr. Gavin Macgregor-Skinner

Ebola Communication Plan – Public & Private

Source: Dr. Gavin Macgregor-Skinner

Ebola Response Team - Sustainability



Mobilizing Local Resilience Teams

Credit: Gavin Macgregor-Skinner/USAID

Mobile Phones

Mobile H5N1 Decontamination

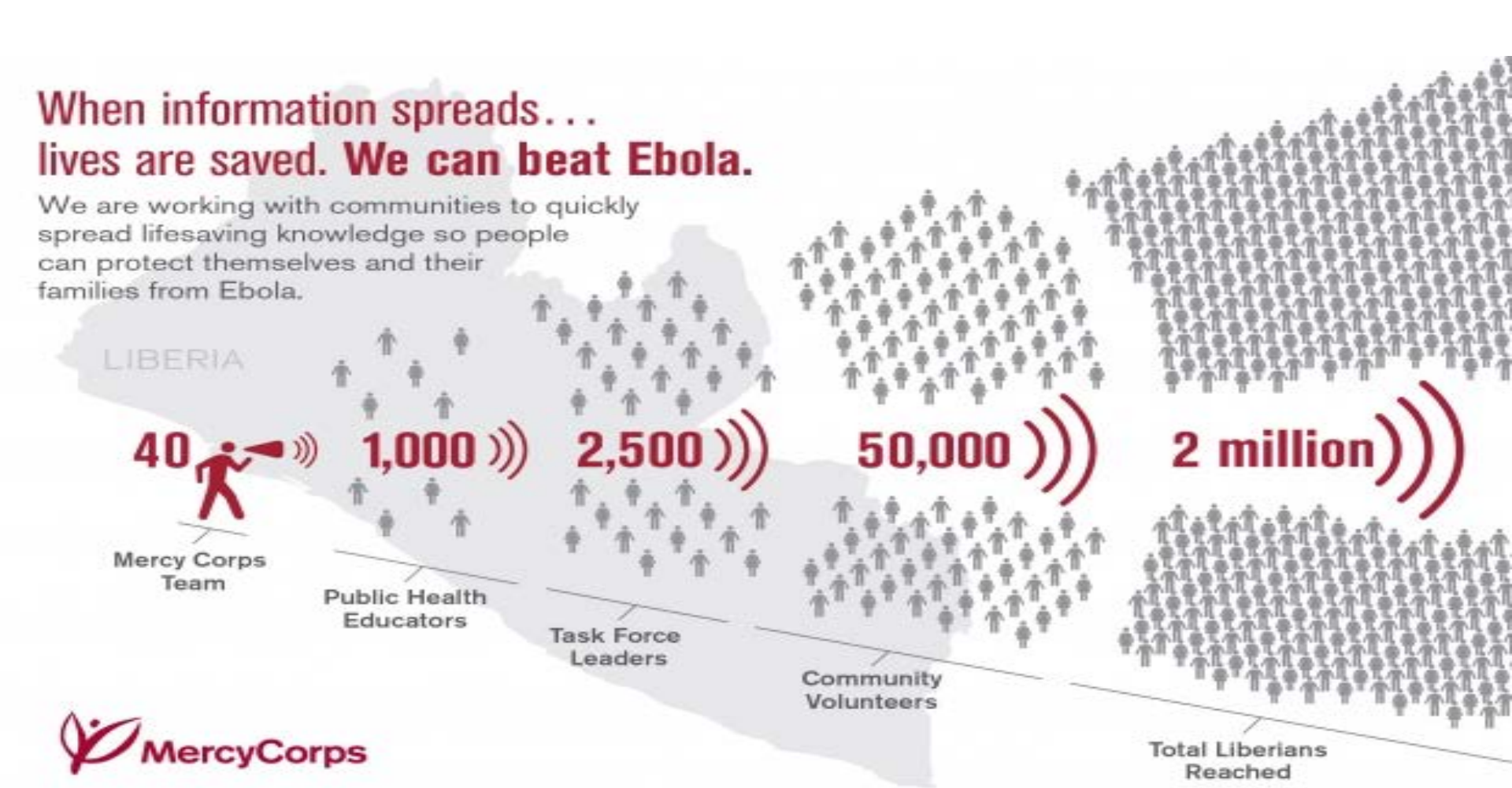
Using disinfectants from

DUPONT
The miracles of science™

DOW
Living.
Improved daily.

Bangladesh and Megaphones

Credit: Claudia Janke


When information spreads...
lives are saved. We can beat Ebola.
We are working with communities to quickly spread lifesaving knowledge so people can protect themselves and their families from Ebola.
LIBERIA
40
1,000
2,500
50,000
2 million
Mercy Corps Team
Public Health Educators
Task Force Leaders
Community Volunteers
Total Liberians Reached
MercyCorps

Patriot
COBHAM

Telemedicine - VSee

Look After Your Team

It Is Not Just The PPE

Source: Dr. Gavin Macgregor-Skinner

Patient Triage

Source: Dr. Gavin Macgregor-Skinner

Decision Making

Source: Dr. Gavin Macgregor-Skinner

Who Is On The Team – Mental Health

Source: Dr. Gavin Macgregor-Skinner

Celebrate Your Successes

DAVID GOLDMAN/ASSOCIATED PRESS

Amber Joy Vinson, the Dallas nurse who was successfully treated for Ebola, hugs Emory University Hospital physician Bruce Ribner.

Second infected nurse now free of Ebola

EBOLA FROM A1

Thomas Eric Duncan, a Liberian man who died of Ebola on Oct. 8.

"many Liberians, who at first denied the epidemic was real, have come to their senses and changed

African leaders not to close their borders at a time when the stricken countries need a massive influx

Source: Dr. Gavin Macgregor-Skinner

Critical Mission Functions

angry with Gruber for giving Re- able Care Act is working."

Find it all at usatoday.com and on our free apps

No Ebola found in airport checks

Only 7 travelers referred to CDC for exams

Liz Szabo
USA TODAY

Airport screenings of travelers from West Africa haven't turned up anyone with Ebola, health officials said Tuesday.

U.S. officials screened nearly 2,000 travelers for Ebola symptoms over 31 days in October and November, according to a report Tuesday from the Centers for Disease Control and Prevention.

Only seven travelers with symptoms were referred to the CDC for medical exams, and none had the disease, the report says.

Although two travelers from West Africa were later diagnosed with Ebola — an American doctor and a Liberian national — neither had symptoms in the air or in airports.

The diagnosis in September of the first Ebola patient in the USA, Thomas Eric Duncan, led to widespread calls for travel bans from affected countries.

Though President Obama rejected an outright ban, the CDC announced in October that it would work with U.S. Customs and Border Protection to screen travelers from Ebola-affected countries in West Africa, funneling those air passengers through five major airports.

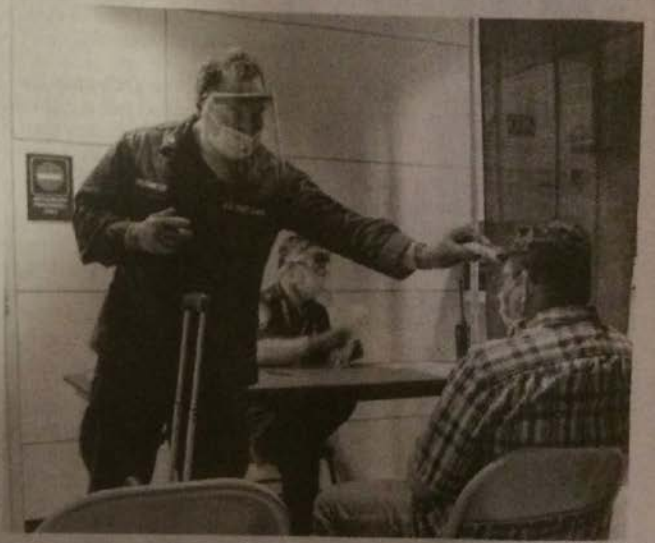
The CDC has worked with the World Health Organization and officials in Liberia, Sierra Leone and Guinea, the five hardest-hit countries, to screen passengers before they exit those countries.

U.S. officials screened nearly 2,000 travelers over 31 days in October and November, according to a report Tuesday from the CDC.

About 80,000 air travelers have flown out of the three countries since August, about 12,000 of them bound for the USA, according to the CDC report.

The three countries prevented anyone with Ebola symptoms, such as a fever, from boarding a plane. None of the travelers prevented from boarding had Ebola.

Infectious disease expert Robert Murphy says airport screening is "overkill" and "a big waste of time."



MELISSA MAYAL, AP

Coast Guard technician Nathan Wallenmeyer, left, and Customs supervisor Sam Ko test a passenger at Chicago's O'Hare.

Phase II Ebola Management Anticipatory Science Base

- Natural Experiments in Ebola Management Being Studied Using Big Data
- Studying Key Determinants, Interdependence, and Cascading Effects
  - Ebola Transmission and Translocation
  - Ebola Resistance at the Community Level
  - Remaining Ebola-free at the Community Level
  - Building Resilience in Ebola-affected Communities
- Data Collection
  - Currently Large Gaps in Ebola Data
  - Crowd-sourcing & Intelligent Social Networks to Collect Data within Resilience Networks
  - Secondary Data Sources being Organized and Shared
  - Resilience Capacity Zones
    - Assessments and Maps of Mission Critical Function Status of Ebola-affected & At Risk Communities
- Analytical Methods
  - Descriptive Statistics of Marginal Use
  - Non-linear Dynamical System Analysis Providing Greater Insights
  - Network Science: RDF and Graph Databases Being Established
  - Modeling and Simulation Providing Scientific Foundations for Changes in Epidemic
- Visual Analytics and Phase II Communications
  - Providing Situational Awareness
  - Elevating Behavioral and Social Immunity, while Enhancing Community-based Collaboration

Phase II in Liberia

- Partnering with ORT: 550 Liberian Trainers
- Partnering with Liberian Universities: 1000 Participants
- Partnering with LEAF: Engaging 100s of Farmers
- Partnering with Churches & Local NGOs: 1000s
- Phase II, Stage I: Four RCZ Pilots Starting 11/14
- Phase II, Stage II: Fifty RCZs Established for Behavioral and Social Immunity Ring Vaccination Starting 12/14
- Phase II, Stage III: Three Hundred Fifty RCZs Established for Behavioral and Social Immunity Ring Vaccination Starting 2/15

LIBERIA LTEP CENTERS FOR SKILLS INNOVATION (CSI)

LOFA

BONG

NIMBA

Monrovia, ORT Office - Sinkor

CSI - Lofa County
Voinjama District Women for Peace and Development (VOWOPEDE)

Foya

Kolahun

VOINJAMA
(Skills Center)

Zorzor

CSI - Nimba County
Sanniquellie Mah Women Association (SMWA)

Yakepa

Ganta

SANNIQUELLIE
(Skills Center)

Fear spreads as Ebola moves from remote areas into cities

BY TODD C. FRANKEL

FREETOWN, SIERRA LEONE — The dreaded Ebola virus came to the children's hospital in the form of a 4-year-old boy.

His diagnosis became clear three days after he was admitted. The Ola During hospital — the nation's only pediatric center — was forced to close its steel gates. Fear swelled. The boy died. The 30 doctors and nurses who had contact with him were placed in quarantine, forced to nervously wait out the 21 days it can take for the virus to emerge. And remaining staff so far have refused to return to work. They, along with millions of others, are facing the worst Ebola outbreak in history. Already, the hardest-hit West African nations of Guinea, Liberia and Sierra Leone have reported more than 3,000 cases, including the infections of 240 healthcare workers.

Ebola is now spreading from the remote provinces and into the teeming cities such as Freetown, where 1.2 million people jostle for space. Previous outbreaks had been limited to remote villages, where containment was aided by geography. The thought of Ebola taking hold in a major city such as Freetown or Monrovia, Liberia's capital, is a virological nightmare. Last week, the World Health Organization warned that the number of cases could hit 20,000 in West Africa.

"We have never had this kind of experience with Ebola before," David Nabarro, coordinator of the new U.N. Ebola effort, said as he toured Freetown last week.

EBOLA CONTINUED ON A18

Ebola TV & Radio Interviews

http://www.ergriffinresearch.org/about/news.php

Source: Dr. Gavin Macgregor-Skinner

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